

“Business Practice Guidelines” to Advance Translational Research Activities Involving Multiple Institutions

COST SHARING IN COLLABORATIVE TRANSLATIONAL RESEARCH ACTIVITIES

Overview

In multi-institutional collaborations a key sticking point often is how to allocate payments from a funding source to cover the indirect costs—those administrative and facility costs not related to project-specific costs. Different cost structures of partners often drive these “cost sharing” problems. Some partners have extensive infrastructure and so have higher indirect rates, while others are less complex with lower indirect costs. Another issue arises when collaborating institutions need services from each other—what is the proper pricing one institution should charge the other? This section proposes methods of dealing with these cost sharing problems.

Addressing the Problem of Collaborators with Different Indirect Rates

Collaborating institutions with different indirect cost structures need to develop approaches for determining the allocation of indirect costs based on the specific source of funding and the activities undertaken. There is not a one-size-fits-all approach to determine how research institutions with different indirect cost structures play together. Two typical situations arise:

First, the multi-institutional research collaboration may undertake a joint research project funded by a federal government agency, such as the NIH. In this case, the allocation of indirect costs is not a major problem because each research institution should be reimbursed for indirect costs based on its approved government indirect cost rates. If a research institution does not have an approved government rate structure, which occurs when the institution does not have a base of federal government research activities, then the institution either will defer to the approved government rate structure of the lead partner as a subcontractor or submit contingency rates that might be audited in the future.

Second, research institutions may engage in joint projects where a funding source—particularly outside of the federal government, such as foundations, state government and industry—may offer a single indirect cost rate to all institutions involved in a project. This creates a dilemma in how to share this single rate of indirect cost payment across institutions that have different indirect rate structures.

Dealing with this situation requires significant sensitivity to the level of effort of the different partners. The allocation of fixed indirect rates across research partners should be negotiated on a project-by-project basis, recognizing that each project may involve a different mix of organizations with different levels of indirect costs and different interests in the project. It may be that a particular project’s scientific and clinical merit is sufficient to interest an organization despite lower indirect reimbursement. Other organizations may conclude that the same project is not of sufficient interest to accept significantly lower indirect rates.

Collaborating organizations should share information regarding negotiations with funding sources and discuss the economics of particular projects. As collaborating organizations

pursue projects, such as early stage clinical trials or preclinical validation, all partners should be informed about ongoing negotiations with funders regarding reimbursement for indirect costs.

Finally, the single indirect rates offered by foundations, state government and industry may fall short of the full indirect costs associated with research activities. While this practice might seem to have cost implications only for the specific project, in certain circumstances accepting the lower indirects from non-federal sources may have the unintended consequence of lowering the indirect cost payments from NIH, which can create a huge financial penalty for research organizations. Collaborating institutions should be aware of this issue as they negotiate indirect cost payments from non-federal sources.

Addressing the Problem of How to Charge Co-Collaborators for Services

In some situations, collaborating institutions may have a strategic relationship in which they leverage each other's capabilities and resources and provide services in exchange for some form of reimbursement. In this case, what is the proper pricing that one institution should charge the other for its services? In particular, should the rates charged by the institution providing the service be higher than, equal to, or less than a rate that reflects direct and indirect costs?

Collaborating institutions should consider charging each other their own internal rates for services. Internal rates would include both the direct and indirect costs (as approved by the federal government or as reflected in financial statements), but would not include profits associated with providing the service. In certain situations, research institutions subsidize the use of their facilities or labs for their own researchers. These subsidies should not be passed along to partners. Of course, for each project institution legal counsel should examine the particular circumstances and determine whether the financial relationship created between the collaborating institutions is in compliance with the Anti-Kickback Statute and the Stark Law.

Addressing The Disincentives of Accepting Discounted Indirect Rates

When does discounted indirect rates significantly undermine an organization's financial situation and how can the problem be addressed.

Short Answer:

When organizations are not able to grow their indirect costs in relation to the growth of their direct costs – such as by adding new facilities, core labs or administrative functions – then accepting indirect cost rates can have a perverse impact on NIH funding.

From a state perspective, there needs to be a broader recognition of the potential disincentives and negative financial impacts of discounted rates, as well as matching fund requirements, on individual biomedical research institutions. Efforts should be made to mitigate their effects.

Discussion

Accepting discounted indirect rates for a research project can have negative financial ramifications for an organization in regards to its overall NIH funding that can reach well beyond that individual project. To understand how this can happen, it is important to consider:

- How federal indirect cost rates are calculated

- The effect of accepting lower indirect rate from foundation or state grant
- Even more pervasive impact of matching fund requirement

Calculation of Federal Indirect Cost Rates:

To calculate the federal indirect cost rate, the federal agency, such as NIH, basically asks the institution to go to its last completed budget and total all the funds that it expended directly on research, regardless of the source of those funds. This is the direct cost of research, and goes into the denominator of the indirect cost equation. The numerator is the total institutional budget minus its research costs (i.e., its overhead costs).

In the simplest case, let us say that in 2004 an institution had a total budget of \$1,000,000, and that it spent \$600,000 of its total budget directly on research. The federal indirect cost rate for 2005 would then be:

$$(\$1,000,000 - \$600,000) / \$600,000 = 66.7\%$$

Now let's make this a little more realistic by accounting for where these dollars come from. So, for example, let us say that the institution has a 66.7% indirect cost rate, and that of the total \$600,000 research budget, \$300,000 comes from an NIH grant and \$300,000 comes from institutional funds given to new investigators to develop preliminary data for their grant proposals. The NIH grant will then also contribute \$200,000 in indirects and the institution will put in \$200,000 more for special needs such as new library resources to yield the total annual budget figure of \$1,000,000.

$$\frac{(\$300,000 + \$300,000 + \$200,000 + \$200,000) - (\$300,000 + \$300,000)}{(\$300,000 + \$300,000)} = 66.7\%$$

Effect of Accepting a Grant with a Lower Indirect Cost Rate:

Now suppose that in 2005 the institution receives a foundation or state grant for \$200,000, plus a standard 20% indirect cost reimbursement (\$40,000). The institution's total budget for 2005 now consists of the \$1,000,000 it already had, plus an additional \$200,000 for direct research costs of the new grant, plus the additional \$40,000 for overhead. Its direct research costs will now consist of the \$600,000 it was already spending plus the additional \$200,000 from the new grant. Thus, we have:

$$\frac{(\$1,000,000 + \$200,000 + \$40,000) - (\$600,000 + \$200,000)}{(\$600,000 + \$200,000)} = 55\%$$

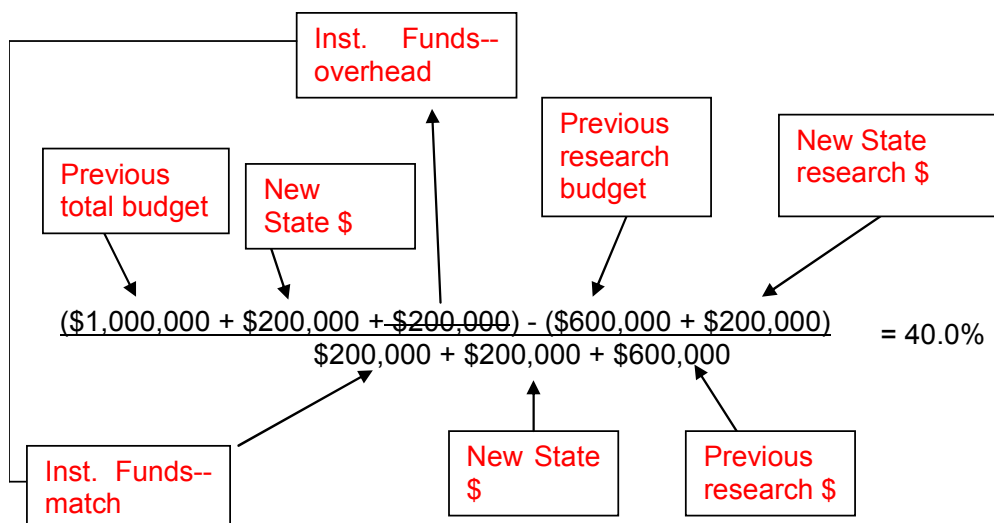
Although the NIH typically does not apply the lower indirect cost rate to grants already awarded, it does apply the lower rate to all new grants. Thus, if the institution receives a new \$300,000/year NIH grant in the following year, the indirect cost reimbursement from that grant will drop from \$200,000/year to \$165,000/year.

From the perspective of NIH or other federal agencies, the reason to lower their indirect cost rates as total budget rises is in recognition that a facility or administrative cost should only be paid for one time.

However, there is a real opportunity cost to the institution in terms of its long term ability to invest in growing its facilities, labs and other indirect resources to advance research because of its acceptance of discounted indirect cost grant awards. After five years, the loss of NIH indirect cost revenue from accepting the discounted indirect grant award will nearly wipe out the entire dollar value of the award itself. With two new NIH grants, the discounted indirect grant award will actually cause, over five years, a loss of twice as much revenue as it provided!

Effect of Accepting a Matching Grant:

Matching grants are dramatically worse. Consider a state matching grant of \$200,000. Matching grants carry a "double-whammy" effect on the NIH cost reimbursement calculation: 1) The denominator increases by \$400,000 (\$200,000 in research dollars provided by the state plus \$200,000 in research dollars provided by the institution as its match). However, the numerator, total revenues minus research costs, increases by only half as much (\$200,000), as the state money is the only new money received. 2) In fact, the numerator actually decreases by \$200,000 because the \$200,000 that the institution was previously putting in to cover additional overhead (e.g., new library acquisitions, renovations) must now be used for the match. In essence, we flip \$200,000 out of the numerator and into the denominator :



- As a result of accepting the state matching grant, in the following year the institution will receive only \$120,000 indirect cost reimbursement on any new \$300,000 NIH grant, instead of \$200,000. In two more years, this loss will cumulate, such that accepting the state matching grant will actually cause the institution to lose \$40,000 in total research revenue. If still more new NIH grants are received, the negative effect will be commensurately increased and equally permanent.

Smaller Institutions More Vulnerable than Larger Institutions:

The examples given above are for a relatively small institutions. Larger institutions suffer proportionately less from accepting lower indirect cost grants or matching grants in terms of diminution of their indirect cost rates.

Moreover, larger institutions, particularly public universities or private organizations with sizable endowments, have the ability to increase their indirect costs in support of a growing research base -- through adding facilities and core labs -- more easily than smaller institutions through the use of state bond funds, and investing indirect cost support or private endowment.

It could well be asked if an institution can get by with the 20% overhead on a non-NIH grant, why shouldn't its overhead on all grants, including NIH grants, be just 20%? Or, put another way, if the full NIH overhead rate is accurate, where does the overhead money needed to support other grants with lesser rates come from? The answer is that to support the nonfunded overhead costs of, say, a foundation or state grant, institutions typically have to substitute institutional funds that they were previously using for overhead enhancements (e.g., renovating outmoded labs, purchasing new library journals and access, etc). This has a substantially negative impact on the ability of the institution to do science generally, and can only be sustained temporarily. At a certain point, all institutional "enhancement" overhead funds will be exhausted, and at that point the institution can actually no longer afford to take on any grants that do not reimburse overhead costs fully.

Guiding Principles and Recommendations:

Matching funds should be used in a strategic manner focused on priority areas. Biomedical organizations often need to invest in enhancing or growing new capacities in a focused area of research. In these cases having access to matching funds can be a useful means to increase the pool of available funding and can often be used to attract additional funding, especially from philanthropic or corporate sources. However, as a general rule, requiring biomedical organizations to come up with matching funds for all research activities can have a pervasive impact on an institution's indirect cost reimbursement. Therefore, the use of matching funds should be limited, and focused to enhance strategic directions in which there is already a commitment by biomedical organizations.

State programs should seek to mitigate the unintended negative impacts of its lower indirect rates by allowing project-related indirect costs to be covered under the direct costs of the state grant. The reason that state and foundation research grant programs have lower indirect cost rates is that they want more of their funding to go towards direct research activities, and leverage their grants into larger funding support from NIH or build off of NIH investments in the capacities of the institutions. The irony is that by hampering the resources of an institution to grow its non-project specific research capacities, state and foundation research grant programs can dramatically reduce the value of those very same NIH grants, producing over time an actual loss of revenue.

Short of accepting the NIH indirect cost rate, which would dramatically limit the funds going to research, one way for state research grant programs to address this problem is to allow more of the direct grant award to be used to support project-related costs that enhance the capacity of an organization to carry out the work, such as fitting out a lab or renovating space to support the work. According to federal accounting rules, the funds spent on project-related indirect costs

paid by state direct grant funds, would be considered indirect costs in calculating federal indirect rates.

Thus, pursuing a policy of allowing biomedical organizations to itemize specific indirect costs associated with a state-funded research grant can address unintended negative impacts of discounted indirect costs.

Arizona should consider financing programs to assist smaller non-profit research institutions in growing their facilities and core labs to keep pace with the growth of their research budgets. Another way Arizona could assist smaller non-profit research institutions is to help them in the financing of new facilities and equipment to keep pace with the growth of their research grants, so that their level of indirect costs continues to grow and justifies higher federal indirect reimbursement.

Arizona should work with its Congressional delegation to have NIH indirect rates not consider research grants from state programs in the calculation. Biomedical research is a national priority. Research advances supported by an individual state benefits the nation as a whole. So there is a national interest in having state governments fund additional research activities – particularly if it is more translational in focus or oriented towards advancing pilot projects that allow for more competitive research proposals to NIH. NIH rightfully should remain the main driver of institutional capacity, and so state government research grant awards should be allowed to leverage that institutional capacity and not be considered in calculating indirect rates.